

SYSTEM AND METHOD FOR PIERCING DERMAL TISSUE

ABSTRACT OF THE DISCLOSURE

A system for piercing dermal tissue includes a skin-piercing element (e.g., an integrated micro-needle and biosensor medical device), at least one electrical contact (e.g., an electrical skin contact) and a meter configured for measuring an electrical characteristic (e.g., resistance and/or impedance) existent between the skin-piercing element and the electrical contact(s) when the system is in use. The electrical contact(s) can be integrated with a pressure/contact ring of the meter to provide a compact and inexpensive system compatible with integrated micro-needle and biosensor medical devices. Also, a method for piercing dermal tissue that includes contacting dermal tissue (e.g., skin) with at least one electrical contact and inserting a skin-piercing element into the dermal tissue while measuring an electrical characteristic existent between the skin-piercing element and the electrical contact(s).